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72875	7590	08/03/2009	EXAMINER	
SUGHRUE MION, PLLC			MALEK, LEILA	
2100 Pennsylvania Avenue, N.W.				
Washington, DC 20037			ART UNIT	PAPER NUMBER
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			NOTIFICATION DATE	DELIVERY MODE
			08/03/2009	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

USPTO@sughrue.com  
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## DETAILED ACTION

### ***Response to Arguments***

Applicant's arguments filed on 07/14/2009 have been fully considered but they are not persuasive.

**Applicant's Argument:** Applicant argues that DiFazio fails to teach or suggest "a detection magnitude is evaluated on the basis of the estimated channel parameters and of a correlation between a signal received at the receiver system and the predetermined digital sequence"

**Examiner's Response:** Examiner respectfully disagrees. Examiner asserts that DiFazio teaches a detection magnitude (i.e. the signal power) is evaluated on the basis of estimated channel parameters (see Figs. 2, 3, blocks 7, 12, 13, and paragraphs 0027 and 0029) and a correlation (see matched filter 12) between a signal received at the receiver system (see paragraph 0028) and the predetermined digital sequence (see the third input of matched filter 12 (i.e., the code for physical channel with TFCI)). DiFazio in paragraph 0029 discloses that the received and demodulated communication is also forwarded to the matched filter 12, as well as the channel impulse response from the channel estimation device 7. Signal power estimator 13 receives the output of the matched filter. As explained above, this output has been generated based on the channel impulse response information. Therefore DiFazio clearly teaches that the detection magnitude (i.e. the output of block 13) is evaluated on the basis of estimated channel parameters.

**Applicant's Argument:** Applicant argues that in DiFazio "the signal power is not evaluated on the basis of the noise estimation, since the output of the noise estimator (11) and the output of the signal power estimator (13) are compared and transmitted to the data estimation device 2." In other words, there is no input from the noise estimator to the signal power estimator in order to allow the signal power to be estimated on the basis of a noise estimation.

**Examiner's Response:** In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., an input from the noise estimator to the signal power estimator in order to allow the signal power to be estimated on the basis of a noise estimation) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

**Applicant's Argument:** Applicant argues that DiFazio fails to teach or suggest that "channel parameters representing a statistical behavior of the radio channel are estimated".

**Examiner's Response:** Examiner respectfully disagrees. Examiner asserts that in general, channel estimation devices in communication systems provide an estimate for the statistical behavior of the channel. Since there is no further details provided by the Applicant for limitation "representing statistical behavior of the channel", the output of channel estimation device 7 (see DiFazio, Fig. 2) has been interpreted as a signal representing the statistical behavior of the channel.

**Applicant's Argument:** Applicant argues that Scott has no relevance to the claimed invention.

**Examiner's Response:** Examiner respectfully disagrees. Examiner asserts that reference Scott is directed to a method/apparatus for detecting a signal (see the abstract). Examiner would like to call the attention of the Applicant to the preamble of claim 1, where Applicant states "Method for detecting a signal". Therefore Applicant's invention and reference Scott are in the same field of endeavor.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LEILA MALEK whose telephone number is (571)272-8731. The examiner can normally be reached on 9AM-5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad Ghayour can be reached on 571-272-3021. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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